

FORM PCT-1100  
(REV. 11-98)

U.S. DEPARTMENT OF COMMERCE, PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

P/1629-43

TRANSMITTAL LETTER TO THE UNITED STATES  
DESIGNATED/ELECTED OFFICE (DO/EO/US)  
CONCERNING A FILING UNDER 35 U.S.C. 371

U.S. APPLICATION NO. (If known, see 37 C.F.R. 1.53)

09/78/750

INTERNATIONAL APPLICATION NO.

PCT/SE99/01664

INTERNATIONAL FILING DATE

22 September 1999

PRIORITY DATE CLAIMED

22 September 1998

TITLE OF INVENTION

GOLF TRAINING DEVICE

APPLICANT(S) FOR DO/EO/US

John SKÅLEN

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a FIRST submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a SECOND or SUBSEQUENT submission of items concerning a filing under 35 U.S.C. 371.
3. ☒ This express request to begin national examination procedures (35 U.S.C. 371(d)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 39(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claimed priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
  - a. ☐ is transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☒ has been transmitted by the International Bureau.
  - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
  - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
  - b. ☐ have been transmitted by the International Bureau.
  - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
  - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☐ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11. ☐ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☐ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☐ A FIRST preliminary amendment.  
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:

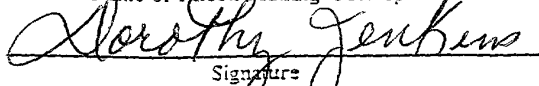
Print EFS Form  
1 Drawing Sheet (1 Figure)  
Inventor Designation Sheet  
(unsigned Declaration)  
Copies of PCT Intl. papers

## EXPRESS MAIL CERTIFICATE

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail Post Office to Addresses (mail label EL613112470US in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on March 21, 2001

Dorothy Jenkins

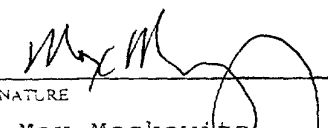
Name of Person Mailing Correspondence



Signature

March 21, 2001

Date of Signature

U.S. APPLICATION NO. (if known) <b>09/787750</b>		INTERNATIONAL APPLICATION NO. <b>PCT/SE99/01664</b>		ATTORNEY'S DOCKET NUMBER <b>P/1629-43</b>	
17. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492(a)(1)-(5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO <span style="float:right">\$1,000.</span>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO <span style="float:right">\$860.</span>  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO <span style="float:right">\$710.</span>  International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) <span style="float:right">\$690.</span>  International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) <span style="float:right">\$100.</span>  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS</b> PTO USE ONLY	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	5 - 20 =	0	\$18.00	\$	
Independent claims	1 - 3 =	0	\$80.	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			0 - \$270.	\$	
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 1,000.00</b>	
Reduction of 1.2 for filing by small entity, if applicable. A Small Entity Statement must also be filed (Note 37 CFR 1.9, 1.27, 1.28).				\$	
<b>SUBTOTAL =</b>				<b>\$ 1,000.00</b>	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				<b>\$ 1,000.00</b>	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 1,000.00</b>	
				Amount to be: refunded	\$
				charged	\$
a. <input checked="" type="checkbox"/> A check in the amount of <u>\$ 1,000.00</u> to cover the above fees is enclosed.      Check No. <u>3877</u>					
b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed.					
c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>15-0700</u> . A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO <b>OSTROLENK, FABER, GERB &amp; SOFFEN, LLP</b> 1180 Avenue of the Americas New York, NY 10036-8403  Tel: (212) 382 0700					
				 SIGNATURE <b>Max Moskowitz</b>	
				NAME <b>30,576</b>	
				REGISTRATION NUMBER	

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GOLF TRAINING DEVICE

- 5 The present invention relates to a golf training arrangement and, more specifically, to an arrangement comprising a golf ball which is used during the tee strike training and which, after the strike, is automatically returned with the aid of a substantially rigid line secured to the
- 10 ball and, at its opposite, free end adapted to be anchored in the ground at a predetermined distance in front of the ball, and a ring slidable along said line and also on an elastic line, extending substantially across said rigid line, for cooperation with said elastic line the free ends
- 15 of which are adapted to be anchored in the ground, whereby said ball is, after the strike, by said ring and said rigid line, to which the ball is secured, resiliently halted and then returned.
- 20 In the market-place there do today exist a number of prior art arrangements comprising rubber loops or rubber tapes, which are used e.g. for tennis training and also to train golf ball tee strikes. Those arrangements do not provide control over the return of the ball since the force of the
- 25 strike will determine the speed of the returning ball. For that reason there do often occur accidents caused by balls hitting either the person training or spectators close to the tee. The prior art does also include light plastic balls, some of which are perforated, adapted for training
- 30 golf swings and ball hits. These do, however, not create a realistic sense and ball hit and it is almost impossible to decide whether the ball hit was good or not.

The object of the present invention is to provide an

35 arrangement of the type mentioned above which comprises a golf ball and which offers the possibility in a safe and realistic way to train golf swings and ball hits. In

contrast to the prior art arrangement this one does return the ball in a way under control, meaning that during the end of the return movement the ball is brought back to the player at ground level and to the tee. At the same time

5 identified sections along the front portion of the rigid line indicate the distance from the ball to the ring interconnecting the lines and to the crossing elastic line, thereby providing an indication about which type of club to be used. When the training is carried out with a

10 club of the driver type, the ground connection of the rigid line is moved for example closer to the tee so that the distance between the ball and the crossing line is increased. If the training is carried out with an iron club, e.g. number six, the ground connection is instead

15 moved to a greater distance from the tee whereby the distance between the ball and the crossing line is reduced. The factor decisive for the basic function of the training arrangement is namely that the ball should be returned to the tee, at the same time indicating that the

20 player has made a correct strike. The features of the invention are set out in the subsequent claims.

Thanks to the invention there has been provided an arrangement which in an excellent manner satisfies its

25 purpose and which, in addition thereto, is simple to use and cheap to manufacture. The combination of use of an actual golf ball and the fact that the arrangement according to the invention offers a control return movement creates a very realistic experience of the ball hit which

30 completely determines the quality of the training. Thanks to the fact that the ball is secured to a substantially rigid line, extending from the golf ball to a ground connection, and which via a ring, preferably a metal ring, is slidably held in position on the crossing elastic line,

35 the above-mentioned controlled strike and return of the ball is achieved. When a strike is made the crossing elastic line, or rubber line, catches the ball travelling

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in the strike direction, which is then converted to a catching direction defining a pulling parabola different from the mentioned direction of the strike. This parabola includes a downwardly towards the ground oriented return movement of the ball, the elastic line keeping the rigid line, at which the ball is secured, depressed and pulls the ball back to ground level along the ground and up to the starting position at the tee. Stated in other words, the interconnection between the longitudinal rigid line and the resilient line forces the ball after the strike earlier to change its direction to a downwardly oriented path thereby storing in the resilient line energy for the return of the ball. The rigid line, at which the ball is secured, exhibits marked sections in front of the passage through the metal ring on the resilient line so that a player who wishes to train with a driver club can in a convenient manner move the golf ball and the rigid line connected therewith away from the resilient line. When the training is with an iron club, the distance between the golf ball and the metal ring can be decreased, either by movement of the crossing line relatively the ball or by displacement of the ground connection of the rigid line. Stated in other words and as has been mentioned above, one can in a simple way change the distance between the ball and the metal ring in response to the type of golf club used since clubs with different angles generate ball trajectories of different height. This does further increase the possibility to determine whether the strike was good or not. In order to facilitate change of ball it could be releasably attached to the rigid line via a mounting ring. Further, the use of a ring for the purpose of interconnecting the rigid line with the resilient line provides the advantage that it is completely impossible for a ball in movement to roll in below the crossing line in which case it would not be caught thereby. Finally, it must be stressed that the golf training arrangement according to the invention does only require a small area

which is distinctly defined because the line to which the ball is secured is substantially rigid.

The invention will now be described more in detail, reference being made to the drawing which diagrammatically shows an arrangement comprising a golf ball to be used in connection with tee strikes for training purposes and at which the ball is, following the strike, automatically returned to its tee position.

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As shown in the drawing a ball 1 is secured to the one end 2 of a rigid line 3, which in turn has its free end 4 anchored in the ground. The connection between the line 3 and the ball 1 is made in such a way that the ball must not be given a through hole. Instead, expanding means can be used, e.g. in the shape of a bolt or a corrugated fastener member, in the center of the ball core. The free end of the expander bolt or the fastener member, respectively, has a member cooperating with the ring used for releasable connection of the ball 1 to the rigid line 3. Alternatively, the line could be secured in the ball core by vulcanization, so as to be integrated therewith. Further, a mounting ball in the ball 1 has a greater diameter in the shell of the ball 1 than in the ball core whereby is achieved that lateral forces generated at the strike are not transferred to the shell where they could otherwise cause cracking.

The portion 5 of the rigid line 3 adjacent the ball 1 carries a ring 6 slidable thereon and manufactured in a suitable material, for example plastic or metal. It can also slide on and cooperate with a resilient line 7 extending substantially across the rigid line 3. This resilient line 7 can be constituted by a rubber line and it is, at its free ends 8, 9, adapted to be secured to ground. Since the metal ring 6 encloses both the rigid line 3 and the resilient line 7 a returning golf ball 1

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cannot, in an uncontrolled way, return below the resilient line 7 and then hit the player or a spectator.

According to the preferred embodiment the length of the  
5 rigid line 3 is about seven meters and that of the cross-  
ing resilient line 7 about five meters. The metal ring 6,  
which is traversed by both those lines, is at a distance  
from the golf ball 1 which depends on the type of club  
selected for the training. In the example illustrated one  
10 has, with the aid of the markings on line 3, chosen a  
distance of about two meters. The distance from the ball  
to the crossing line 7 is marked on the rigid line 3 with  
sections A-C which could have the colours blue A, white B  
and yellow C. With reference thereto the location of the  
15 golf ball relatively the metal ring 6 and the crossing  
line 7 can easily be determined in response to the type of  
club used at the training. The training arrangement  
according to the invention does automatically signal the  
quality of the strike because, upon a good strike the ball  
20 will under control be returned to its tee position where-  
as, when the strike is bad, the ball will come to rest at  
a longer or shorter distance from its tee position.

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CLAIMS

5 1. An arrangement, comprising a golf ball (1) which  
is used during the tee strike training and which, after  
the strike, is automatically returned with the aid of a  
substantially rigid line (3) secured to the ball (1) and,  
at its opposite, free end adapted to be anchored in the  
10 ground at a predetermined distance in front of the ball,  
and a ring (6) slidable along said line (3) and also on an  
elastic line (7), extending substantially across said  
rigid line (3), for cooperation with said elastic line (7)  
the free ends (8, 9) of which are adapted to be anchored  
15 in the ground, whereby said ball (1) is, after the strike,  
by said ring (6) and said rigid line (3), to which the  
ball (1) is secured, resiliently halted and then returned,  
c h a r a c t e r i z e d i n that the rigid line (3)  
does, along its front portion (5), exhibit marked sections  
20 (A-C) which indicate the distance from the ball (1) to the  
ring (6), interconnecting the lines, and to the crossing  
elastic line (7) thereby informing the player about which  
club he is to use to realize the basic function of the  
arrangement, namely that the ball will returned to the tee  
25 location following a correct and perfect strike.

2. An arrangement according to Claim 1,  
c h a r a c t e r i z e d i n that the length of the  
rigid line (3) is approximately seven meters and that of  
30 the crossing, resilient line (7) about five meters.

3. An arrangement according to Claim 1,  
c h a r a c t e r i z e d i n that the rigid line (3) is  
secured in the ball (1) by expansion means or by the  
35 corrugated fastener member in the center of the ball core  
cooperating with a holding ring attached to line (3).

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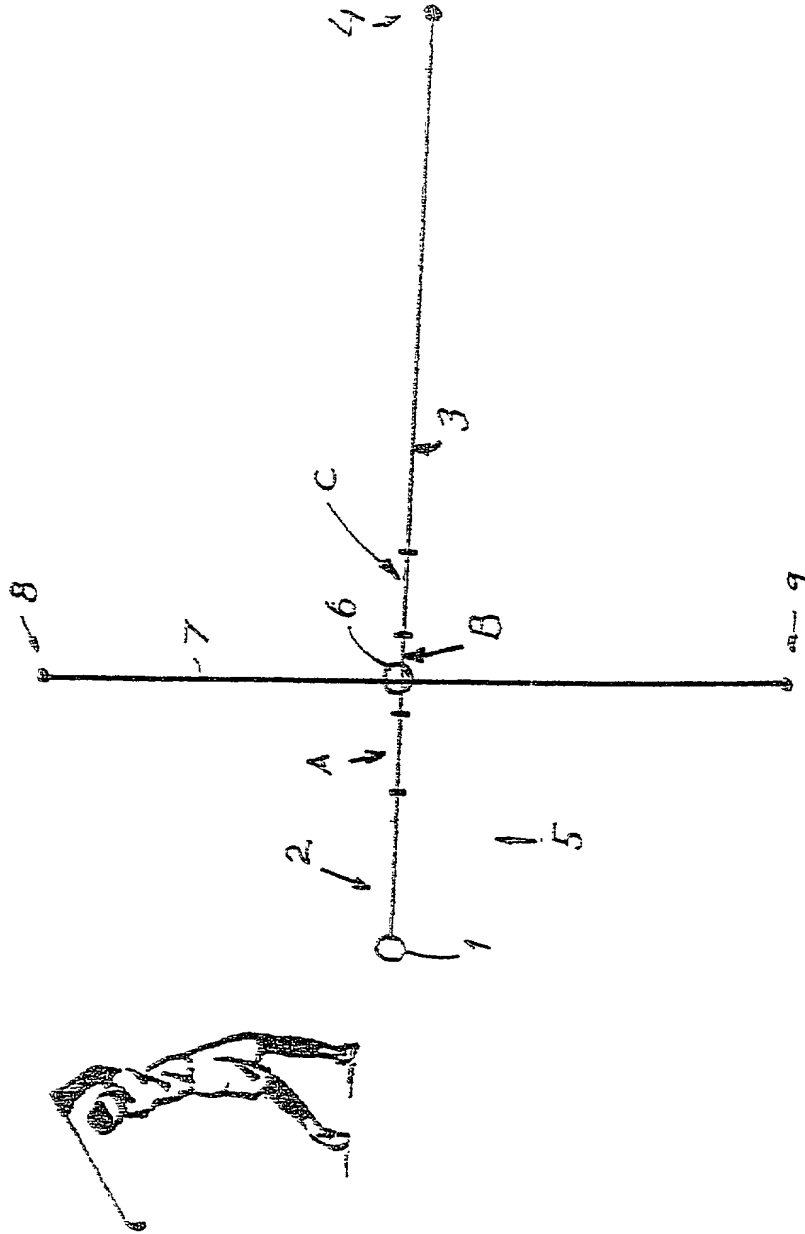
4. An arrangement according to Claim 3,  
c h a r a c t e r i z e d i n that the ball (1) has a  
mounting hole the diameter of which is greater through the  
shell of the ball than through the center of the ball  
5 core.
5. An arrangement according to Claim 1,  
c h a r a c t e r i z e d i n that the line (3) is  
integrated with the ball core by a vulcanization process.

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ABSTRACT

5 The invention relates to an arrangement, comprising a golf  
ball (1) which is used during the tee strike training and  
which, after the strike, is automatically returned with  
the aid of a substantially rigid line (3) secured to the  
ball (1) and, at its opposite, free end adapted to be  
10 anchored in the ground at a predetermined distance in  
front of the ball, and a ring (6) slidable along said line  
(3) and also on an elastic line (7), extending substan-  
tially across said rigid line (3), for cooperation with  
said elastic line (7) the free ends (8, 9) of which  
15 retaining the rigid line (3) are resiliently halted and  
then returned. The rigid line (3) does, along its front  
portion (5), exhibit marked sections (A-C) which indicate  
the distance from the ball (1) to the ring (6), inter-  
connecting the lines, and to the crossing elastic line (7)  
20 thereby informing the player about which club he is to use  
to realize the basic function of the arrangement, namely  
that the ball will returned to the tee location following  
a correct and perfect strike.

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UNITED STATES OF AMERICA  
COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION

OFGS FILE NO.  
P/1629-43

As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named) of the subject matter which is claimed and for which a patent is sought on the invention entitled

**GOLF TRAINING DEVICE**

the specification of which is attached hereto, unless the following box is checked.

☒ was filed on 22 September 1999 as United States patent Application Number or PCT International patent application number PCT/SE99/01664 and was amended on \_\_\_\_\_ (if any).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above  
I acknowledge the duty to disclose all information known to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56.

I hereby claim priority benefits under Title 35, United States Code §119 of any foreign application(s) for patent or inventor's certificate or United States provisional application(s) listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

Prior Foreign or Provisional Application(s)

COUNTRY	APPLICATION NUMBER	DATE OF FILING (day, month, year)	PRIORITY CLAIMED UNDER 35 U.S.C. 119
Sweden	9803213-9	22 September 1998	YES <u>X</u> NO ____
			YES ____ NO ____
			YES ____ NO ____

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

UNITED STATES APPLICATION NUMBER	DATE OF FILING (day, month, year)	STATUS (patented, pending, abandoned)

I hereby appoint customer no. 2352 OSTROLENK, FABER, GERB & SOFFEN, LLP, and the members of the firm, Samuel H. Weiner - Reg. No. 18,510; Jerome M. Berliner - Reg. No. 18,653; Robert C. Faber - Reg. No. 24,322; Edward A. Meilman - Reg. No. 24,735; Steven I. Weisburd - Reg. No. 27,409; Max Moskowitz - Reg. No. 30,576; Stephen A. Soffen - Reg. No. 31,063; James A. Finder - Reg. No. 30,173; William O. Gray, III - Reg. No. 30,944; Louis C. Dujmich - Reg. No. 30,625; Douglas A. Miro - Reg. No. 31,643, and Michael J. Scheer - Reg. No. 34,425, as attorneys with full power of substitution and revocation to prosecute this application, to transact all business in the Patent & Trademark Office connected therewith and to receive all correspondence.

SEND CORRESPONDENCE TO.

**OSTROLENK, FABER, GERB & SOFFEN, LLP**  
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DIRECT TELEPHONE CALLS TO:  
(212) 382-0700

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

FULL NAME OF SOLE OR FIRST INVENTOR <u>John SKÅLEN</u>		INVENTOR'S SIGNATURE <u>John Skålen</u>	DATE <u>APRIL 9, 2001</u>
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FULL NAME OF SECOND JOINT INVENTOR (IF ANY)		INVENTOR'S SIGNATURE	DATE
RESIDENCE (City and either State or Foreign Country)		COUNTRY OF CITIZENSHIP	
POST OFFICE ADDRESS			

☐ CONTINUED ON PAGE 2